



September 9, 2020

Mr. Ryan McCormick  
Boston Scientific  
4255 Cummings Park Dr,  
Arden Hills, MN 55126

Dear Mr. McCormick:

On September 5, 2020, TRC Environmental Corporation (TRC) performed a test to determine the Ethylene Oxide (EtO) removal efficiency of one Donaldson Abator EtO control device at the Hamline Avenue facility and also EtO emissions from the abator heat exchanger vent. This letter summarizes the results of that test.

The test consisted of the collection of simultaneous samples of the gas stream entering and leaving the EtO control device and also the abator heat exchanger vent. Evacuated summa cannisters were used to collect the EtO. Sample was collected during the evacuation cycle of the abator for about 15 minutes. The summa cannisters were analyzed for EtO via Modified EPA Method 18. The results of the test are presented in the following table:

| Test Location                 | EtO Concentration (ppm) | EtO Control Device Removal Efficiency (%) |
|-------------------------------|-------------------------|---|
| Control Device Inlet (Tap)    | 75,253                  | 99.993%                                   |
| Control Device Outlet (Stack) | 5.3                     |   |
| Abator Heat Exchange Vent     | 7.0                     | -   |

If you have any questions regarding this information, please let me know. We appreciate the continuing opportunities to provide you with our services.

Sincerely,

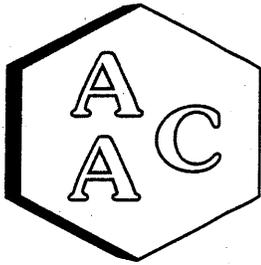
TRC Environmental Corporation

A handwritten signature in black ink, appearing to read "David Wainio".

David Wainio  
Senior Project Manager  
651-686-0700 x 12107  
dwainio@trccompanies.com

Lab Summary  
Efficiency Calculation

|                | PPM     |
|----------------|---------|
| Inlet Loading  | 75253   |
| Outlet Loading | 5.3     |
| Efficiency%    | 99.9930 |
| Heat Exchange  | 7       |



## Atmospheric Analysis & Consulting, Inc.

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CLIENT : TRC  
PROJECT NAME : Boston Scientific Donaldson Abator EtO  
PROJECT NUMBER : 409747  
AAC PROJECT NO. : 201612  
REPORT DATE : 09/09/2020

On September 8, 2020, Atmospheric Analysis & Consulting, Inc. received three (3) 1.4-Liter Silonite Canisters for Ethylene Oxide analysis by EPA 18 Modified. Upon receipt, the samples were assigned unique Laboratory ID numbers as follows:

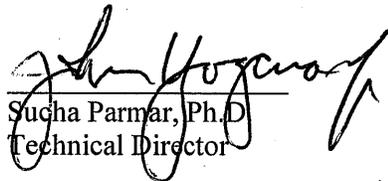
| Client ID          | Lab No.      | Return Pressure (mmHg) |
|--------------------|--------------|------------------------|
| Abator Inlet       | 201612-12126 | 491.7                  |
| Abator Stack       | 201612-12127 | 631.4                  |
| Abator Heat X Vent | 201612-12128 | 568.2                  |

This analysis is performed in accordance with AAC's Quality Manual. For detailed information pertaining to specific EPA, NCASI, ASTM and SCAQMD accreditations (Methods & Analytes), please visit our website at [www.aaclab.com](http://www.aaclab.com).

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. No problems were encountered during receiving, preparation, and/or analysis of these samples.

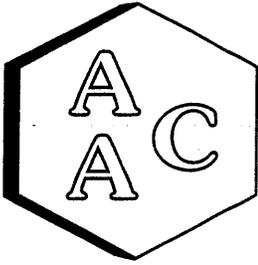
The Technical Director or his/her designee, as verified by the following signature, has authorized release of the data.

If you have any questions or require further explanation of data results, please contact the undersigned.

  
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Sucha Parmar, Ph.D.  
Technical Director

This report consists of 4 pages.





# Atmospheric Analysis & Consulting, Inc.

## LABORATORY ANALYSIS REPORT

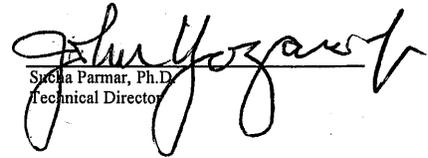
**CLIENT** : TRC  
**PROJECT NO.** : 201612  
**MATRIX** : Air  
**UNITS** : ppmV

**SAMPLING DATE** : 09/05/2020  
**RECEIVING DATE** : 09/08/2020  
**ANALYSIS DATE** : 09/08/2020  
**REPORT DATE** : 09/09/2020

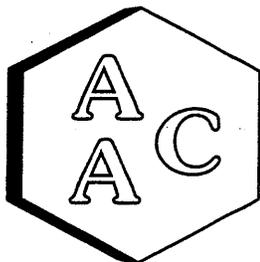
### Ethylene Oxide Analysis by EPA 18 Modified

| Client ID          | Abator Inlet |                    | SRL<br>(RL x DF's) | Abator Stack |                    | SRL<br>(RL x DF's) | Abator Heat X Vent |                    | SRL<br>(RL x DF's) | Reporting Limit<br>(RL) |
|--------------------|--------------|--------------------|--------------------|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------|
| AAC ID             | 201612-12126 |                    |                    | 201612-12127 |                    |                    | 201612-12128       |                    |                    |                         |
| Canister Dil. Fac. | 3.1          |                    | 2.5                |              | 2.7                |                    |                    |                    |                    |                         |
| Analyte            | Result       | Analysis Dil. Fac. |                    | Result       | Analysis Dil. Fac. |                    | Result             | Analysis Dil. Fac. |                    |                         |
| Ethylene Oxide     | 75253        | 500                | 780                | 5.3          | 1                  | 1.2                | 7.0                | 1                  | 1.4                | 0.5                     |

*Sample Reporting Limit (SRL) is equal to Reporting Limit (RL) x Canister Dilution Factor x Analysis Dilution Factor (if applicable)*

  
 Sacha Parmar, Ph.D.  
 Technical Director





# Atmospheric Analysis & Consulting, Inc.

## Quality Control/Quality Assurance Report

Date Analyzed : 09/08/2020  
 Analyst : DL/CH  
 Units : ppmv

Instrument ID : FID #3  
 Calb Date : 07/01/20  
 Reporting Limit : 0.1 ppmV

### I - Opening Continuing Calibration Verification - EPA M18 Modified

| AAC ID | Analyte    | Ethylene Oxide |
|--------|------------|----------------|
| CCV    | Spike Conc | 38.00          |
|        | Result     | 35.20          |
|        | % Rec *    | 92.6           |

### II - Method Blank - EPA M18 Modified

| AAC ID | Analyte       | Ethylene Oxide |
|--------|---------------|----------------|
| MB     | Concentration | ND             |

### III - Laboratory Control Spike & Duplicate - EPA M18 Modified

| AAC ID                | Analyte      | Ethylene Oxide |
|-----------------------|--------------|----------------|
| Lab Control Standards | Sample Conc  | 0.00           |
|                       | Spike Conc   | 38.00          |
|                       | LCS Result   | 38.71          |
|                       | LCSD Result  | 38.70          |
|                       | LCS % Rec *  | 101.9          |
|                       | LCSD % Rec * | 101.9          |
|                       | % RPD **     | 0.0            |

### IV - Sample & Sample Duplicate - EPA M18 Modified

| AAC ID       | Analyte    | Ethylene Oxide |
|--------------|------------|----------------|
| 201612-12128 | Sample     | 2.62           |
|              | Sample Dup | 2.52           |
|              | Mean       | 2.57           |
|              | % RPD **   | 4.1            |

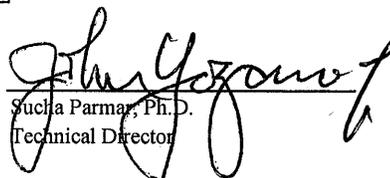
### V - Matrix Spike & Duplicate - EPA 18 Modified

| AAC ID       | Analyte      | Ethylene Oxide |
|--------------|--------------|----------------|
| 201612-12128 | Sample Conc  | 1.28           |
|              | Spike Conc   | 38.00          |
|              | MS Result    | 39.13          |
|              | MSD Result   | 39.74          |
|              | MS % Rec **  | 99.6           |
|              | MSD % Rec ** | 101.2          |
|              | % RPD ***    | 1.60           |

### VI - Closing Continuing Calibration Verification - EPA M18 Modified

| AAC ID | Analyte    | Ethylene Oxide |
|--------|------------|----------------|
| CCV    | Spike Conc | 38.00          |
|        | Result     | 39.48          |
|        | % Rec *    | 103.9          |

\* Must be 85-115%  
 \*\* Must be < 25%  
 ND = Not Detected  
 <RL = less than Reporting Limit

  
 Sucha Parmar, Ph.D.  
 Technical Director



